

AMENDMENTS TO THE SPECIFICATION

Amend the paragraph starting on page 9, at line 21, as follows:

As shown in Fig. 4, an example message that is exchanged in the secure communications session is illustrated. Fig. ~~[[7]]~~ 4 shows an IP packet 300 that includes an IP header 302, an ESP header 304, and a protected payload section 306. The protected payload section 306 contains the original IP header, TCP or UDP port numbers, and the data payload. The IP header 302 includes a source address, a destination address, and a protocol identifier to indicate the next level protocol that is used (e.g., TCP, UDP, or ESP). The payload section 306 is protected by encryption. In other embodiments, other formats for IP packets protected by a security protocol may be employed.

Amend the paragraph starting on page 10, at line 25, as follows:

Referring to Figs. 5 and 6, the keep-alive module 130 can be in one of two different modes: monitor mode and control mode. Monitor mode can be used for connections between the router 22 or 28 and an access system that is ~~[[are]]~~ not permanent in nature, such as an analog dial-up connection or an Integrated Services Digital Network (ISDN) dial-up connection. In such connections, tariffs imposed by the local exchange carrier may discourage maintaining permanent connections between the router 22 or 28 and the associated service provider 18 or 20 through the access system. On the other hand, where permanent connections between the router 22 or 28 and the service provider through the access system is available, such as when an xDSL (digital subscriber line) or cable modem is employed, then the keep-alive module 130 may be set in the control mode, which is designed to maintain permanent connections if possible.

Amend the paragraph starting on page 12, at line 6, as follows:

Referring to Figs. 7A and 7B, some example embodiments of the connections between the router 22 or 28 and the service provider system 18 or 20 are illustrated. In the Fig. 7A embodiment, a bridge 602 is connected to the router 22 or 28 over a channel 604. The channel 604 may be an Ethernet channel in one example. The bridge 602 translates data on the link 604 to a format of another channel 206 that is connected to the other side of the bridge 602. Examples of the channel 606 include an xDSL[[,]] channel, an ISDN channel, an analog dial-up channel, or another type of channel. The channel 606 is coupled to central office equipment 608 provided by a local exchange carrier (LEC), which is usually a telephone company. The central office equipment 608 is in turn coupled to the service provider system 18 or 20. Alternatively, the service provider system 18 or 20 may be part of the central office 608. In the Fig. 3A embodiment, the access system includes the bridge 602 and the central office equipment 608.